

What is claimed is:

1. A time synchronization system comprising:

a GPS (Global Positioning System) receiver for receiving a time signal from a Global Positioning System (GPS), and outputting a UTC (Universal Time Coordinated) synchronization reference pulse signal synchronizing with UTC and a UTC synchronization absolute time signal composed of a serial signal representing an absolute time; and

a time signal distributor for generating a reference time signal by synthesizing the UTC synchronization reference signal and the UTC synchronization absolute time signal, and transmits this reference time signal in distribution to a plurality of distributed control oriented terminal devices.

2. A time synchronization system according to claim 1, wherein said time signal distributor synchronizes a rising edge of the UTC synchronization reference signal with UTC, and transmits the time synchronization signal to each of said terminal devices with a fixed period.

3. A time synchronization system according to claim 1, wherein said terminal device includes a reference clock operating in synchronization with the rising edge of the UTC synchronization reference signal, for generating a time signal representing a time on the finer order than a minimum time unit that is processed in the UTC synchronization absolute time signal, and internal clock correction means for comparing an internal time value based on said reference clock with an external time value synchronizing with the UTC synchronization reference signal, and correcting said reference clock so that the time of said reference clock synchronizes with the UTC synchronization reference signal.

4. A time synchronization system according to claim 3, wherein said internal clock correction means includes means for changing a unit delimiting width of the correction, corresponding

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